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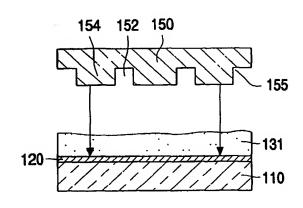
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(54) Title: FIELD EMISSION DEVICE, AND METHOD OF MANUFACTURING SUCH A DEVICE



(57) Abstract: A field emission device (100) is provided with a cathode electrode (120) and a gate electrode (140). Between these electrodes, a patterned dielectric layer (130) is provided. According to the invention, this dielectric layer (130) is manufactured from a liquid precursor material (131) which is patterned by means of a liquid embossing step, i.e. engaging a patterned stamp (150) with the liquid material (131). After removing the stamp (150), the liquid material is cured to form the patterned dielectric layer (130). Preferably, in a subsequent manufacturing step, the cathode electrode (120) or the gate electrode (140) is formed over the patterned dielectric layer (130) in a self-aligned way.

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A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H01J9/02 G03F7/00

H01J1/304

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

 $\begin{array}{ccc} \mbox{Minimum documentation searched} & \mbox{(classification system followed by classification symbols)} \\ \mbox{IPC 7} & \mbox{H01J} & \mbox{G03F} \end{array}$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX, IBM-TDB

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X Further documents are listed in the continuation of box C.	Patent family members are tisted in annex.
Special categories of cited documents: A* document defining the general state of the art which is not considered to be of particular relevance E* earlier document but published on or after the international filling date L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) O* document referring to an oral disclosure, use, exhibition or other means P* document published prior to the international filling date but later than the priority date claimed	 "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family
Date of the actual completion of the International search 14 July 2004 Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo ni, Fax: (+31-70) 340-3016	Date of mailing of the International search report 21/07/2004 Authorized officer Schmidt-Kärst, S

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